7.	After getting better quality of proposed crystals, the crystals are to be doped with various impurities to change (i) colour, (ii) size and also other properties.	6 Months
8.	The characterization of proposed crystals will be done by different techniques to study the difference between undoped and doped crystals extensively.	6 Months
9.	After completing characterization and analysis a research paper will be published and start to write the thesis. After completion of writing the thesis will be submitted to the university.	6 Months

REFERENCES:

1. Raghavan P. and Ramasamy P., Crystal Growth Processes and Methods, KRU Publications, Kumbakonam.
2. Ueda R. and Mullin J., Crystal Growth and Characterization, North Holland Publication Company, Amsterdam, Oxford, American Elsvier Publishing Company, Inc. New York.
3. Celis K., Driessche I.V., Mouton R., Vanhoyland G., Hoste S. (2001), Kinetics of Consecutive Reaction in the Solid State Thermal Decomposition of Oxalate, Measurement Science Review, Vol.1, No.1, pp 177-180.

4. Al-Newaiser F.A., Al-Thabaiti S.A., Al-Youbi A.O., Obaid A.Y., and Gabal M.A. (2007), Thermal Decomposition Kinetics of Strontium Oxalate, Chemical Papers, Vol.61, No.5, pp 370-375.

5. Roy P.K. and Bera J. (2003), Formation of $SrTiO_3$ from Sr-Oxalate and TiO_2, J. Electro ceramics, Vol.11, pp 131-137.

6. Dalal P.V., Saraf K.B. and Shah S. (2009), Growth of Barium Oxalate Crystals in Agar-Agar Gel and Their Characterization, Crystal Research Technology, Vol.44, No.1, pp 36-42.

7. Dalal P.V. and Saraf K.B. (2006), Growth and Study of Barium Oxalate Single Crystals in Agar Gel, Bulletin of Materials Science, Vol.29, No.5, pp 421-425.

8. Parekh B.B., Vyas P.M., Vasant S.R., and Joshi M.V. (2008), Thermal, FT-IR and Dielectric Studies of Gel Grown Sodium Oxalate Single Crystals, Bulletin of Materials Science, Vol.31, No.2, pp 143-147.

9. Stoyanova R., Angelov S. and Bozhilov K.(1990), Localization of CO_2^- Anion Radicals in Strontium Carbonate obtained by thermal Decomposition of Strontium Oxalate, J. Phys. Chem. Solids, Vol.51,No.10, pp1163-1169.

10. Sureshkumar B., Rahimkutty M., Sudarshankumar M.and Rajendrababu K.(2007), Growth and Characterization of Pure and Lithium Doped Strontium Tartrate Tetrahydrate Crystals by Solution-Gel Technique, Bulletin of Materials Science, Vol.30, No.4, pp 349-355.

11. Ajeetha N. (2007), Crystal Growth and Characterization of Calcium, Barium and Strontium in Gel Media, Bulg.J. Physics, Vol.34, pp 108-115.

12. Medeiros, Moura, Silva, Souza, Gomes and Gomes (2006), The thermal Decomposition of Monohydrated Ammonium Oxotris (Oxalate) Niobate, Brazilian Journal of Chemical Engineering, Vol.23, No.4, pp 531-538.

13. Rahimkutty, Rajendrababu, Pillai, Sudarshankumar and Nair (2001), Thermal Behaviour of Strontium Tartrate Single Crystals Grown in Gel, Bulletin of Materials Science, Vol.24, No.2, pp 249-252.

14. Shitole S.J. and Saraf K.B.(2001), Growth and Study of some Gel Grown Group II Single Crystals of Iodate, Bulletin of Materials Science, Vol.24, No.5, pp 461-468.

15. Garud S.L. and Saraf K.B.(2008), Growth and Study of mixed Crystals of Ca-Cd Iodate, Bulletin of Materials Science, Vol.31, No.4, pp 639-643.

16. Garud S.L. and Saraf K.B. Mahajan N.K.(2009), Study of Gel Grown mixed Crystals of $Ba_xCa_{(1-x)}(IO_3)_4$, Bulletin of Materials Science, Vol.32, No.2, pp 187-192.

17. Bhavsar D.S., Saraf K.B. and Seth T.(2002), Studies on Growth and Microstructure of Lead Iodide Single Crystals, Crystal Research Technology, Vol.37, pp 225-230.

18. Patil A.B.and Saraf K.B.(2009), Growth and Study of Gel Grown Single Crystals of Zinc Iodate, AJCER, Vol.2(1-2), pp 64-69.

19. Patil A.B.and Saraf K.B.(2009), Spherulites of Mercuric Iodate Grown by Gel Technique and It's Analysis, AJCER, Vol.2(3-4), pp 69-74.

20. Jhon M.V.and Ittyachen M.A.(1998), Studies on $Ce_2(C_2O_4)_3.nH_2O$ Crystals Grown in Hydro-Silica Gel, Bulletin of Materials Science, Vol.21, No.5, pp 387-391.

21. Raju K.S. John V. and Ittyachen M.A.(1998), Growth and Physico Chemical Characterization of Lanthanum Neodymium Oxalate Single Crystals, Bulletin of Materials Science, Vol.21, No.5, pp 375-380.

22. Sawant D.K. Patil H.M. and Patil J.H.(2010), Study of Gel Grown Calcium Tartrate Crystals, AJCER, Vol.3(2), pp 21-26.

23. Jini T., saban K.V. and Varghese G.(2006), The Growth, Spectral and Thermal Properties of the Coordination Compound Crystal-Strontium Malate, Crystal Research Technology, Vol.41, pp 250-254.

24. Mathew V., Jochan J., Jacob S .and Abraham K. E.(2010), Crystallization and Spectroscopic Studies of Manganese Malonate, Bulletin of Materials Science, Vol.33, No.4, pp 433-437.

25. Wu Anhua, Xu Jiayue, Zhou Juan and Shen Hui (2007), Piezoelectric Properties of $Sr_3Ga_2Ge_4O_{14}$ Single Crystals, Bulletin of Materials Science, Vol.30, No.2, pp 101-104.

26. Pandita S., Tickoo R., Bamzai K., Kotru P. and Sahni N.(2001), Crystallization of Mixed Rare Earth (Didymium) Molybdates in Silica Gel, Bulletin of Materials Science, Vol.24, No.5, pp 435-440.

27. Parikh K.D., Dave D. J., Parekh B.b. and Joshi M.J.(2007), Thermal, FT-IR and SHG Efficiency Studies of L-arginine Doped KDP Crystals, Bulletin of Materials Science, Vol.30, No.2, pp 105-112.

28. Bhavsar D.S., Saraf K.B.(2003), Optical and Structural Properties of Zn-Doped Lead Iodide Thin Films, Materials Chemistry and physics, Vol. 78, pp 630-636.

29. Bhavsar D.S., Saraf K.B.(2002),Morphology of PbI2 Crystals Grown by Gel Method, Crystal Research Technology, Vol.37, pp 51-55.

30. Uhuegbu, Chidi (2010), Solution Growth Technique for Iron Copper Sulphide ternary Thin Film and Its Optical Characteristics, American Journal of Scientific and Industrial Research, Vol.1(3), pp 392-396.

31. Halberstadt E.S., Henisch H.K.(1968), Recent Experiments on crystal Growth in Gels, Journal of Crystal Growth,Vol.3(4), pp 363-366.

32. Halberstadt E.S., Henisch H.K., Nickl J. and White E.W. (1969), Gel Structure and Crystal Nucleation, Colloid and Interface Science, Vol. 29(3), pp 469-471.

33. Robert M.C. and Lefaucheux F. (1988), Crystal Growth in Gels: Principal and Applications, Journal of Crystal Growth, Vol. 90(1-3), pp 327-328.

34. Andrezza (1988), Nucleation in confined Space: Application to Crystallization in Gels, Journal of Crystal Growth,Vol.3(4), pp 415-422.

RESOURCES:

1. Department of Physical Sciences, North Maharashtra University, Jalgaon.
2. Department of Physics, Pune University, Pune.
3. National Chemical Laboratory, Pune.
4. Department of Physics, Pratap College, Amalner.
5. Department of Physics, S.S.V.P.S's B.S.D. COE, Dhule.
6. SICART, Gujarat.

(Dr.K.B.Saraf)
Guide
Ex-Reader in Physics,
P.G. Department of Physics,
Pratap College, Amalner.

(Mr.A.R.More)
Candidate
Department of Physics,
S.S.V.P.S's B.S.D. COE, Dhule